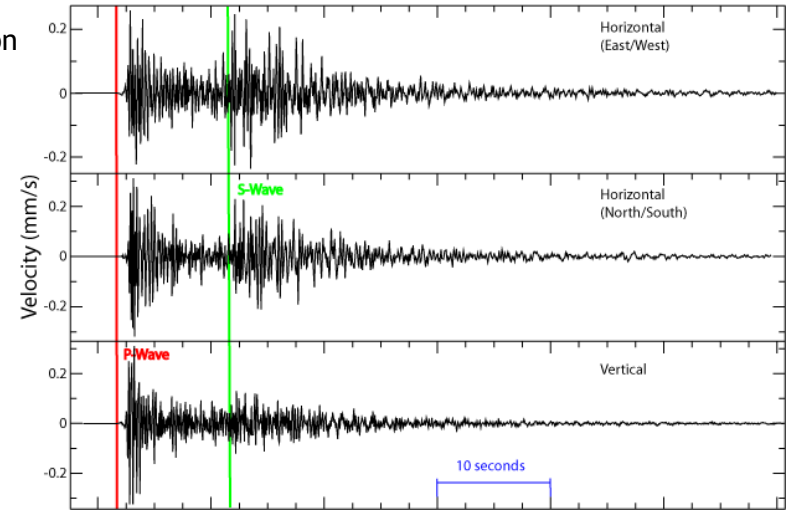
Measuring Earthquake Magnitude

Measuring Magnitude

- **Seismographs** are machines that receive seismic waves, and write them onto graphs, called **seismograms**.
- Since S-waves do not travel through liquids, a seismogram with no S-waves means that the earthquake was on the other side of the Earth from the seismogram.
- The amplitude of waves can determine the magnitude of the earthquake.
- Seismograms record a lot of information: the timing of foreshocks, P-waves, S-waves, surface waves, and aftershocks.
- **Seismometers** are machines that record ground motions. Modern seismometers are electronic, and keep information stored in computers.

Study Tip

Seismographs and seismometers are different; seismographs *graph* information on seismic waves while seismometers simple *record* ground motions.



An example showing three seismograms

Concept Check

- What is a seismograph?
- What is a seismogram, and what does it record?
- What can a seismogram with no S-waves tell you?
- What are seismometers?

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